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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/955,731	09/19/2001	Jordi Ribas-Corbera	3030	9471

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EXAMINER

AN, SHAWN S

ART UNIT	PAPER NUMBER
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2613

DATE MAILED: 01/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/955,731	RIBAS-CORBERA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Shawn S. An	2613	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 September 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-66 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-66 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>9/23/05</u> .   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Response to Amendment***

1. As per Applicant's instructions as filed on 9/23/05, claims 1, 12, 23, 39, 43-46, 48, 51-53, 56-57, 61, and 62 have been amended, and claims 64-66 have been newly added.

### ***Response to Remarks***

2. Applicant's remarks as filed on 9/23/05 have been fully considered but they are not persuasive. The Applicants present arguments of which Ozkan et al reference does not teach or suggest:

A) after encoding of data, using at least two sets of parameters, each of the at least two sets of parameters comprising rate data and buffer size, to determine an operating condition for decoder buffer management as recited on claim 1;

B) at the time varying-signal decoder, using at least two of the sets of parameters to determine an operating condition as recited on claim 12;

C) a first mechanism that determines at least two sets of parameters after encoding, each of the at least two sets of parameters comprising rate data and buffer size data, for maintaining the decoder buffer during decoding such that it does not overflow or underflow as recited on claim 23.

D) receiving at least two different alternative sets of parameters for decoder buffer management as recited on claim 39;

E) processing video data to produce encoded video data and hypothetical reference decoder information, the hypothetical reference decoder information comprising at least two different alternative sets of parameters as recited on claim 46;

F) receiving at least two initial sets of parameters for decoder buffer management as recited on claim 48;

G) a mechanism that receives and processes at least two different alternative sets of buffer management parameters as recited on claim 56; and

H) ("selecting ..."), ("interpolating ..."), and ("extrapolating ...") as recited on claims (6, 17, and 30), (7, 18, and 31), and (8, 19, and 32), respectively.

However, after careful scrutiny of the Ozkan et al reference, the Examiner must respectively disagree, and maintain the grounds of rejection for the reasons that follow.

In response to argument A), Ozkan et al discloses or teaches after encoding of data (output buffer of encoder(s) (10, 14)), using at least two sets of parameters, each of the at least two sets of parameters comprising rate data ( $R_{min}$ ,  $R_{max}$ ) and buffer size (buffer size) to determine an operating condition for decoder buffer management (col. 10, lines 54-67; col. 11, lines 5-17) as recited on claim 1.

In response to argument B), Ozkan et al discloses or teaches at the time varying-signal decoder (decoders), using at least two of the sets of parameters (rate and buffer size) to determine an operating condition (buffer management) (col. 10, lines 54-67; col. 11, lines 155) as recited on claim 12.

In response to argument C), Ozkan et al discloses or teaches a first mechanism that determines at least two sets of parameters after encoding (output buffer of encoder(s) (10, 14)), each of the at least two sets of parameters comprising rate data ( $R_{min}$ ,  $R_{max}$ ) and buffer size data (buffer size), for maintaining the decoder buffer during decoding such that it does not overflow or underflow (no overflow or underflow) (col. 10, lines 54-67; col. 11, lines 136) as recited on claim 23.

In response to argument D), Ozkan et al discloses or teaches receiving at least two different alternative sets of parameters ( $R_{min}$ ,  $R_{max}$ ) for decoder buffer management (col. 10, lines 54-67; col. 11, lines 1-17) as recited on claim 39.

In response to argument E), Ozkan et al discloses or teaches processing video data to produce encoded video data (output buffer of encoder(s) (10, 14)), and hypothetical reference decoder information, the hypothetical reference decoder information comprising at least two different alternative sets of parameters ( $R_{min}$ ,  $R_{max}$ ) (col. 10, lines 54-67; col. 11, lines 1-55) as recited on claim 46;

In response to argument F), Ozkan et al discloses or teaches receiving at least two initial sets of parameters ( $R_{min}$ ,  $R_{max}$ ) for decoder buffer management (col. 10, lines 54-67; col. 11, lines 1-17) as recited on claim 48.

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In response to argument G), Ozkan et al discloses or teaches a mechanism that receives and processes at least two different alternative sets of buffer management parameters ( $R_{min}$ ,  $R_{max}$ ) (col. 10, lines 54-67; col. 11, lines 1-17) as recited on claim 56.

In response to argument G), Ozkan et al discloses or teaches "selecting" one of the sets (selecting encoder buffer size) (col. 10, lines 54-67) as recited on claims 6, 17, and 30.

Furthermore, Ozkan et al discloses or teaches "interpolating" between data points in at least two of the sets (Eq. 8, encoder buffer size  $E_n$ ) (col. 10, lines 54-67) as recited on claims 7, 18, and 31.

Moreover, Ozkan et al discloses or teaches "extrapolating" from data points in at least two of the sets (Eq. 7, encoder buffer size  $E$ ) (col. 10, lines 54-67) as recited on claims 8, 19, and 32.

In view of the reasons as set forth above, the Applicant's arguments are now deemed moot.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-4, 6-15, 17-26, 28-42, 45-50, 53-60, and 63 are rejected under 35 U.S.C. 102(b) as being anticipated by Ozkan et al (5,933,451) as previously discussed in the last Office action as filed on 6/28/05.

5. Claims 64-66 are rejected under 35 U.S.C. 102(b) as being anticipated by Ozkan et al (5,933,451).

Regarding claim 64, Ozkan et al discloses reference decoder parameters (col. 10, lines 54-67; col. 11, lines 1-36).

Regarding claim 65, Ozkan et al discloses parameters being transmitted in a bitstream along with the encoded video data (col. 11, lines 1-17 and lines 36-55).

Regarding claim 66, Ozkan et al discloses parameters comprising initial buffer fullness data (col. 11, lines 36-55).

### ***Claim Rejections - 35 U.S.C. § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 5, 16, 27, 43-44, 51-52, and 61-62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ozkan et al (5,933,451) in view of Morris (6,873,629) as previously discussed in the last Office action as filed on 6/28/05.

### ***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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9. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to *Shawn S. An* whose telephone number is 571-272-7324.
10. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**SHAWN AN**  
**PRIMARY EXAMINER**

1/8/06